THE CLAIMS

Claims 1-12. (Canceled)

13. (Original) A method of measuring permeability and/or permeant sorption comprising the steps of:

providing a housing impervious to a permeant of interest and defining an inner sealable chamber having an inlet for introducing into the chamber an inert medium substantially free of the permeant of interest and an outlet for removing from the chamber the inert medium, and a sensor positioned within the sealed chamber and designed to provide signals, external of the chamber, indicative of permeant concentrations within the chamber;

placing packages to be tested in the chamber, flushing the chamber with the inert medium using the inlet and outlet to reduce permeant concentration in the chamber to a suitable low limit, and sealing the chamber subsequent to flushing;